AMENDMENTS TO THE CLAIMS

Claims 1-90 (Canceled)

91. (Previously Presented) An electrical connector for electrically interconnecting terminals on a flexible circuit member with terminals on a second circuit member, the electrical connector comprising:

a first housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least a portion of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface adapted to couple electrically with the terminals on the flexible circuit member, and second ends extending above the second surface to couple electrically with the second circuit member;

a resilient member comprising a compliant encapsulating material interposed between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes; and

a compliant material positioned along a surface of the flexible circuit member opposite at least one of the terminals of the flexible circuit member.

92. (Previously Presented) The electrical connector of claim 91 wherein first ends of the electrical contact members are attached to the terminals on the flexible circuit member.

93. (Previously Presented) The electrical connector of claim 91 wherein at least one of the terminals on the flexible circuit member comprises a singulated terminal.

94. (Previously Presented) The electrical connector of claim 91 wherein the complaint material positioned along the opposite surface of the flexible circuit member comprises a sheet material.

95. (Previously Presented) The electrical connector of claim 91 wherein the complaint material positioned along the opposite surface of the flexible circuit member is discontinuous.

96. (Previously Presented) The electrical connector of claim 91 wherein the second surface of the housing includes at least one device site corresponding to the second circuit member.

97. (Previously Presented) The electrical connector of claim 91 wherein the second ends of the electrical contact members have a shape that corresponds to a shape of the terminals on the second circuit member.

98. (Previously Presented) The electrical connector of claim 91 wherein the second ends of the electrical contact members are capable of engaging with a connector member selected from the group consisting of a flexible circuit, a ribbon connector, a cable, a printed circuit board, a ball grid array (BGA), a land grid array (LGA), a plastic leaded chip carrier (PLCC), a pin grid array (PGA), a small outline integrated circuit (SOIC), a dual in-line package (DIP), a quad flat package (QFP), a leadless chip carrier (LCC), a chip scale package (CSP), or packaged or unpackaged integrated circuits.

99. (Previously Presented) The electrical connector of claim 91 wherein the electrical contact members are one of a homogeneous material or a multi-layered construction.

100. (Previously Presented) The electrical connector of claim 91 wherein the electrical contact members have a cross-sectional shape selected from one of circular, oval, polygonal, and rectangular.

101. (Previously Presented) The electrical connector of claim 91 wherein a portion of the flexible circuit member is bonded to the first surface of the housing.

102. (Previously Presented) The electrical connector of claim 91 wherein the electrical contact members are electrically coupled to the flex circuit using one or more of a compressive force, solder, a wedge bond, a conductive adhesive, an ultrasonic bond and a wire bond.

103. (Previously Presented) The electrical connector of claim 91 wherein the second ends of at least two of the electrical contact members extend beyond the second surface of the housing by a different amount.

104. (Previously Presented) The electrical connector of claim 91 wherein electrical contact members have a larger cross section proximate the first end than at the second end.

105. (Previously Presented) The electrical connector of claim 91 wherein the plurality of through holes are arranged in a two-dimensional array.

106. (Previously Presented) The electrical connector of claim 91 wherein the resilient member comprises a compliant encapsulating member elastically bonding the electrical contact members to the housing.

107. (Previously Presented) The electrical connector of claim 91 wherein the second ends of the electrical contact members comprises one or more of die level test probes, wafer probes, and printed circuit board probes.

108. (Previously Presented) The electrical connector of claim 91 comprising:

a second housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least a portion of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface adapted to couple electrically with the terminals on the flexible circuit member, and second ends extending above the second surface to couple electrically with a third circuit member.

109. (Previously Presented) The electrical connector of claim 108 wherein the first surface of the first housing is positioned opposite the first surface of the second housing.

110. (Previously Presented) The electrical connector of claim 108 wherein the first housing and the second housing are arranged in a stacked configuration.

111. (Previously Presented) An electrical connector comprising:

a flexible circuit member having a plurality of terminals;

a first housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least a portion of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface adapted to couple electrically with the terminals on

the flexible circuit member, and second ends extending above the second surface adapted to couple electrically with a second circuit member;

a resilient member comprising a compliant encapsulating material interposed between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes; and

a compliant material positioned along a surface of the flexible circuit member opposite at least one of the terminals of the flexible circuit member.

112. (Currently Amended) An electrical connector for electrically interconnecting terminals on a flexible circuit member with terminals on a second circuit member, the electrical connector comprising:

a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least some of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface that are ~~attached~~ fixedly bonded to, and electrically coupled with, the terminals on the flexible circuit member, the flexible circuit member controlling movement of the electrical contact members along their respective central axes, and second ends extending above the second surface to couple electrically with the second circuit member; and

a compliant encapsulating material elastically bonding the electrical contact members to the housing.

113. (Previously Presented) The electrical connector of claim 112 wherein a portion of the compliant encapsulating material is located between the electrical contact members and the holes in the housing.

114. (Previously Presented) The electrical connector of claim 112 wherein at least one of the terminals on the flexible circuit member comprises a singulated terminal.

115. (Previously Presented) The electrical connector of claim 112 comprising a compliant material positioned along a surface of the flexible circuit member opposite at least one of the terminals of the flexible circuit member.

116. (Previously Presented) The electrical connector of claim 115 wherein the complaint material comprises a sheet material.

117. (Previously Presented) The electrical connector of claim 115 wherein the complaint material is discontinuous.

118. (Previously Presented) The electrical connector of claim 112 wherein the second surface of the housing includes at least one device site corresponding to the second circuit member.

119. (Previously Presented) The electrical connector of claim 112 wherein the second ends of the electrical contact members have a shape that corresponds to a shape of the terminals on the second circuit member.

120. (Previously Presented) The electrical connector of claim 112 wherein the second ends of the electrical contact members are capable of engaging with a connector member selected from the group consisting of a flexible circuit, a ribbon connector, a cable, a printed circuit board, a ball grid array (BGA), a land grid array (LGA), a plastic leaded chip carrier (PLCC), a pin grid array (PGA), a small outline integrated circuit (SOIC), a dual in-line package (DIP), a quad flat package (QFP), a leadless chip carrier (LCC), a chip scale package (CSP), or packaged or unpackaged integrated circuits.

121. (Previously Presented) The electrical connector of claim 112 wherein the electrical contact members are one of a homogeneous material or a multi-layered construction.

122. (Previously Presented) The electrical connector of claim 112 wherein the electrical contact members have a cross-sectional shape selected from one of circular, oval, polygonal, and rectangular.

123. (Withdrawn) The electrical connector of claim 112 wherein a portion of the flexible circuit member is bonded to the first surface of the housing.

124. (Previously Presented) The electrical connector of claim 112 wherein the electrical contact members are electrically coupled to the flex circuit using one or more of a compressive force, solder, a wedge bond, a conductive adhesive, an ultrasonic bond and a wire bond.

125. (Previously Presented) The electrical connector of claim 112 wherein the second ends of at least two of the electrical contact members extend beyond the second surface of the housing by a different amount.

126. (Previously Presented) The electrical connector of claim 112 wherein electrical contact members have a larger cross section proximate the first end than at the second end.

127. (Previously Presented) The electrical connector of claim 112 wherein the plurality of through holes are arranged in a two-dimensional array.

128. (Previously Presented) The electrical connector of claim 112 wherein the compliant encapsulating is interposed between a portion of the through holes and a portion of the electrical contact members.

129. (Previously Presented) The electrical connector of claim 112 wherein the second ends of the electrical contact members comprises one or more of die level test probes, wafer probes, and printed circuit board probes.

130. (Withdrawn) The electrical connector of claim 112 comprising:

a second housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least a portion of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface adapted to couple electrically with the terminals on the flexible circuit member, and second ends extending above the second surface to couple electrically with a third circuit member.

131. (Withdrawn) The electrical connector of claim 130 wherein the first surface of the first housing is positioned opposite the first surface of the second housing.

132. (Withdrawn) The electrical connector of claim 130 wherein the first housing and the second housing are arranged in a stacked configuration.

133. (Previously Presented) An electrical connector comprising:

a flexible circuit member having a plurality of terminals;

a first housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least some of the through holes and oriented along the central axes, the electrical contact members having

first ends extending above the first surface that are attached to, and electrically coupled with, the terminals on the flexible circuit member, the flexible circuit member controlling movement of the electrical contact members along their respective central axes, and second ends extending above the second surface to couple electrically with the second circuit member; and

a compliant encapsulating material elastically bonding the electrical contact members to the housing.

134. (Previously Presented) A method of making an electrical interconnect for electrically coupling terminals on a flexible circuit member with terminals on a second circuit member, comprising the steps of:

providing a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

positioning a plurality of elongated electrical contact members in at least some of the through holes oriented along the central axes, the electrical contact members having first ends extending above the first surface;

positioning a flexible circuit member to electrically couple the terminals with the first ends of the electrical contact members;

interposing a compliant encapsulating material between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes; and

positioning a compliant material along a surface of the flexible circuit member opposite at least one of the terminals of the flexible circuit member.

135. (Previously Presented) The method of claim 134 comprising the step of attaching the first ends of the electrical contact members to the terminals on the flexible circuit member.

136. (Previously Presented) The method of claim 134 comprising the step of singulating at least one of the terminals on the flexible circuit member.

137. (Previously Presented) A method of making an electrical interconnect for electrically coupling terminals on a flexible circuit member with terminals on a second circuit member, comprising the steps of:

providing a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

positioning a plurality of elongated electrical contact members in at least some of the through holes oriented along the central axes, the electrical contact members having first ends extending above the first surface;

elastically bonding the electrical contact members to the housing with a compliant encapsulating material;

positioning a flexible circuit member to electrically couple the terminals with the first ends of the electrical contact members; and

attaching the first ends of the electrical contact members to the terminals.

138. (Previously Presented) The method of claim 137 comprising the step of interposing a compliant encapsulating material between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes.

139. (Previously Presented) The method of claim 137 comprising the step of positioning a compliant material along a surface of the flexible circuit member opposite at least one of the terminals of the flexible circuit member.